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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,522	02/15/2006	Shunsuke Takaki	58901US005	2954
32692 7590 12/30/2009 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER MCCLENDON, SANZA L	
			ART UNIT 1796	PAPER NUMBER
			NOTIFICATION DATE 12/30/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/568,522	<b>Applicant(s)</b> TAKAKI, SHUNSUKE	
	<b>Examiner</b> Sanza L. McClendon	<b>Art Unit</b> 1796	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 13, 2009 has been entered.

***Response to Amendment***

1. In response to the Amendment received on October 13, 2009, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 9 and 17-20.

***Response to Arguments***

2. Applicant's arguments filed October 13, 2009 have been fully considered but they are not persuasive. Applicant appears to be relying on the amendment positively stating said photoinitiator is present in an amount from 0.01 to 1.0% by weight to distinguish the instant invention over the prior art. This is not persuasive since the overall teaching of the reference set forth reducing the photoinitiator, as well as, the solvent content will reducing skin irritability in the obtained polyurethane adhesive. While it is noted that 1.5 wt% of photoinitiator is present in the only example, it is deemed that the teaching at paragraph [0033] sets forth that lowering the photoinitiator

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limit will reduce skin irritability. Therefore, it is deemed that the reference gives enough guidance to a skilled artisan to reduce the amount of photoinitiator to further reduce the skin irritation from section 0033. Additionally, the courts have upheld that where the general conditions of the claims are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation. Additionally, In response to applicant's argument that the 0.01 to 1.0 wt% low photoinitiator amount in combination with 0.03 to 1.0% of a hindered phenol-based antioxidant reduce the amount of deterioration of the recited adhesive composition, as well as being free from discoloration, oozing, softening, and other properties as found on page 7 of the arguments and page 20 of the disclosure, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

3. Regarding applicant's argument Takanobu et al does not teach and/or suggest that the addition of 0.03 to 1% of a hindered phenol-based antioxidant can assist in reducing the amount of deterioration of the recited adhesive composition "even upon exposure to a fluorescent lamp for a long period", said argument is not convincing. Takanobu et al teaches the addition of a hinder phenol based antioxidant (di-t-butyl hydroxyl phenol) in example 1 and 2, as an added component in making the polyurethane compound. The examiner deems that one of ordinary skill in the art would have expected a reduction of deterioration even upon exposure to light, fluorescent or otherwise with the addition of an antioxidant since antioxidants are known to stabilize polymers by terminating chain reactions due to the absorption of light. Regarding the 0.03 to 1 wt%, it is deemed that it is obvious to optimize the amount of an ingredient-- In re Boesch 205 USPQ 215. Please find the rejection below.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, and 10-16 are rejected under 35 U.S.C. 103(a) as obvious over Takanobu (JP 2002-060456).

6. Takanobu sets forth a carboxyl containing polyurethane (meth) acrylate oligomer for use in making PSA's useful in medical applications. Said polyurethane has the structure as found in the abstract and section [0008] represented by formula I. The urethane is obtained by reaction of a random copolymer having ethylene oxide and propylene oxide units, a mono-ol containing compound, a carboxyl-groups containing polyol, an organic isocyanate, and a hydroxyalkyl (meth) acrylate compound. In section [0012] it is taught that the M moiety in formula 1 is the dehydration residue of an alkoxy polyethylene glycol, an alkoxy polypropylene glycol, a fatty alcohol, hydroxyl group containing (meth) acrylate and a mono-ol compound chosen from carboxyl group content monoalcohols. The P, B, I, and A moieties are described in sections [0008] to [0012]. These are deemed to read on claims 3 and 14. Takanobu sets forth that said polyurethane can be cured in the presence of active energy, such as UV and electron beam, as well as, heat to obtain a PSA that has excellent curability and moisture permeability. Said urethane composition can be coated onto a substrate, such as a plastic or fabric and cured to obtain a use medical article having PSA properties, as well as, moisture-permeability and low skin irritation. It is deemed that the examples read on the limitations of claims 4-5 and 15. Takanobu teaches that when using electron beam the need for a photoinitiator is eliminated. In addition, it is taught that reducing the photoinitiator content reduces the affect of skin irritation-- see [0033]. Per example 3, the reference teaches the addition of 1.5 wt% of a photoinitiator; however, it is deemed that the limitation of claims 9 and 18 are taught in the reference in such a way that one of ordinary skill in the art understand that lowering the photoinitiator content

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increases the benefit of low skin irritability—see [0033]. Therefore it is deemed that applicant's 0.01 to 1.0 wt% is found in the overall teachings of the reference. Per the examples, Takanobu teaches using a hindered phenol-based antioxidant (di-t-butylhydroxyphenol)—see examples 1 and 2.

Takanobu differs from the instant invention in that there is no teaching of the glass transition of the base polymer being 0 °C or less. The examiner deems that the polyurethane of Takanobu meets the limitations of the claims and, since, the Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether Applicant's composition differs and, if so, to what extent, from the discussed reference. Therefore, with the showing of the reference, the burden of establishing non-obviousness by objective evidence is shifted to the Applicants.

Regarding the plasticizers of claims 2, 6, 13, 16; it is deemed that it would have been well within the skill of an ordinary artisan to incorporate a known additive for their art recognized functions and properties within the composition of Takanobu. The motivation would have been a reasonable expectation of producing a PSA having improved properties. Wherein the courts have upheld it is obvious to add known ingredients to a composition for its known function--see *In re Linder*, 173 USPQ 356 and *In re Dial et al*, 140 USPQ 244. Regarding the limitation in claim 12 regarding heating the adhesive to form a coating having the defined viscosity, it is well within the skill of an ordinary artisan to use heat as a way to modify viscosity to provide a optimal coating parameters--see *In re Aller et al.*, 105 USPQ 233 (CCPA 1955) and *In re Reese*, 129 USPQ 402.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L McClendon/

Primary Examiner,

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SMc